

Patent Claims

1. A single- or multi-layered synthetic-based food casing, wherein the layer or at least one of the layers comprises an antimicrobially active amount of at least one metal salt.  
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2. The food casing as claimed in claim 1, wherein the metal salt comprises ions of silver, copper or zinc and/or other metal ions having antimicrobial, preferably antibacterial, activity.  
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3. The food casing as claimed in claim 1 or 2, wherein it is a casing based on polyamide and/or copolyamide.  
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4. The food casing as claimed in one or more of claims 1 to 3, wherein the (co)polyamide is an aliphatic (co)polyamide.  
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5. The food casing as claimed in claim 4, wherein the aliphatic (co)polyamide is blended with at least one partially aromatic (co)polyamide, preferably at least one amorphous partially aromatic (co)polyamide.  
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6. The food casing as claimed in claim 5, wherein the fraction of the at least one partially aromatic (co)polyamide is no greater than 50 % by weight, preferably no greater than 30 % by weight, in each case based on the total weight of all (co)polyamides.  
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7. The food casing as claimed in one or more of claims 1 to 6, wherein the fraction of metal  
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- 5 salt(s) in the single-layered casing, or in a correspondingly finished layer of the multi-layered casing, is 0.005 to 4.0 % by weight, preferably about 0.01 to 2.0 % by weight, in each case based on the total weight of the casing, or of the layer in the casing.
- 10 8. The food casing as claimed in one or more of claims 1 to 7, wherein the fraction of metal ions is 0.0025 to 2 % by weight, preferably 0.005 to 1.0 % by weight, in each case based on the total weight of the casing or of the relevant layer of the casing.
- 15 9. The food casing as claimed in one or more of claims 1 to 8, wherein it is multi-layered and at least the outer layer comprises at least one antibacterially active metal salt.
- 20 10. The food casing as claimed in one or more of claims 1 to 9, wherein it is tubular, preferably also seamless.
- 25 11. The food casing as claimed in one or more of claims 1 to 10, wherein it is unstretched.
12. The food casing as claimed in one or more of claims 1 to 10, wherein it is biaxially stretched, preferably also heat set.
- 30 13. The food casing as claimed in one or more of claims 1 to 12, wherein it is multi-layered and the further layers are based on polyolefins, polyesters, poly(vinylidene chloride),

poly(ethylene-co-vinyl acetate) and/or  
poly(ethylene-co-methyl methacrylate).

- 5 14. The food casing as claimed in claim 13, wherein it has no more than 5 layers.
15. The food casing as claimed in claim 13, wherein it has a symmetrical structure.
- 10 16. The food casing as claimed in claim 13, wherein it has an asymmetrical structure.
- 15 17. The food casing as claimed in one or more of claims 1 to 17, wherein it is presoaked ready-to-stuff.
- 20 18. The food casing as claimed in one or more of claims 1 to 18, wherein it has a wall thickness of 15 to 150  $\mu\text{m}$ , preferably from 20 to 130  $\mu\text{m}$ , particularly preferably from 35 to 90  $\mu\text{m}$ .
- 25 19. The food casing as claimed in one or more of claims 1 to 19, wherein it has a diameter of about 20 to 200 mm, preferably 30 to 150 mm.
- 30 20. A method for producing a food casing as claimed in one or more of claims 1 to 20, which comprises mixing a master batch which comprises about 5 to 40 % by weight, preferably about 10 to 25 % by weight, of at least one antimicrobially active metal salt with the remaining constituents of the casing or the relevant layer of the casing and then extruding or coextruding the mixture.

21. The method as claimed in claim 21, wherein the master batch comprises as support material a polyolefin, preferably a polyethylene, a polypropylene, a copolymer having ethylene and propylene units, an ethylene/(C<sub>4</sub>-C<sub>8</sub>) $\alpha$ -olefin copolymer, a propylene/(C<sub>4</sub>-C<sub>8</sub>) $\alpha$ -olefin copolymer, or an ethylene/propylene/(C<sub>4</sub>-C<sub>8</sub>) $\alpha$ -olefin copolymer, or a polyamide.